

We claim:

1. A lithographic sheet product consisting essentially of:
a metal substrate having a roll textured surface with an Ra roughness of less than about 40 microinches; and
at least one pretreatment layer positioned on said roll textured surface, said layer comprising a polymer selected from the group consisting of polymers of acrylic acid, polymers of methacrylic acid, organophosphorous polymers and copolymers of organophosphorous compounds and acrylic acid or methacrylic acid, wherein said pretreatment layer is adapted to adhere a printing composition to said sheet product.
2. The lithographic sheet product of claim 1 wherein said metal comprises steel.
3. The lithographic sheet product of claim 1 wherein said metal comprises an aluminum alloy.
4. The lithographic sheet product of claim 3 wherein said roll textured surface has an Ra roughness of less than about 25 microinches.
5. The lithographic sheet product of claim 3 wherein said roll textured surface has an Ra roughness of about 5 to about 15 microinches.
6. The lithographic sheet product of claim 3 wherein said surface is nonanodized or nonsilicated or both.
7. The lithographic sheet product of claim 1 wherein said polymer comprises a copolymer of acrylic acid and vinyl phosphonic acid.

8. The lithographic sheet product of claim 1 wherein at least one of said pretreatment layers further comprises dopant particles of a composition selected from the group consisting of alumina, silica, titanium dioxide, black dye and black pigment.

9. The lithographic sheet product of claim 8 wherein said particles comprise about 4 to about 50 wt.% of said pretreatment layer.

10. The lithographic sheet product of claim 8 wherein said particles comprise alumina particles sized about 1.0 to about 2.0 microns.

11. The lithographic sheet product of claim 8 wherein said particles comprise silica particles sized about 0.02 to about 5 micron.

12. The lithographic sheet product of claim 8 wherein said particles comprise titanium dioxide particles sized about 0.25 to about 0.5 micron.

13. The lithographic sheet product of claim 8 wherein another of said pretreatment layers does not contain said particles.

14. The lithographic sheet product of claim 3 wherein said roll textured surface is etched.

15. The lithographic sheet product of claim 14 wherein said etched surface has an Ra roughness of about 15 to about 50 microinches.

16. The lithographic sheet product of claim 14 wherein said etched surface has an Ra roughness of about 25 microinches.

17. A lithographic sheet product consisting essentially of:
a substrate comprising steel or a polymeric material; and
at least one pretreatment layer positioned on said roll textured surface, said layer comprising a polymer selected from the group consisting of polymers of acrylic acid, polymers of methacrylic acid, organophosphorous polymers and copolymers of organophosphorous compounds and acrylic acid or methacrylic acid, wherein said pretreatment layer is adapted to adhere a printing composition to said sheet product

18. The lithographic sheet product of claim 17 wherein said polymer comprises a copolymer of acrylic acid and vinyl phosphonic acid.

19. The lithographic sheet product of claim 17 wherein said pretreatment layer further comprises dopant particles of a composition selected from the group consisting of alumina, silica, titanium dioxide, black dye and black pigment.

20. The lithographic sheet product of claim 19 wherein said particles comprise about 4 to about 50 wt.% of said pretreatment layer.

21. A lithographic sheet product consisting essentially of:
a substrate; and
at least one pretreatment layer positioned on a surface of said substrate, said layer comprising (i) a polymer selected from the group consisting of polymers of acrylic acid, polymers of methacrylic acid, organophosphorous polymers and copolymers of organophosphorous compounds and acrylic acid or methacrylic acid and (ii) dopant particles of a composition selected from the group consisting of alumina, silica, titanium dioxide, black dye and black pigment, wherein said pretreatment layer is adapted to adhere a printing composition to said sheet product.

22. The lithographic sheet product of claim 21 wherein said particles comprise about 4 to about 50 wt.% of said pretreatment layer.

23. The lithographic sheet product of claim 21 wherein said substrate comprises an aluminum alloy, steel or a polymeric material.

24. The lithographic sheet product of claim 21 wherein said substrate comprises an aluminum alloy and said surface is etched.

25. The lithographic sheet product of claim 24 wherein said etched surface has an Ra roughness of about 15 to about 50 microinches.

26. The lithographic sheet product of claim 24 wherein said etched surface has an Ra roughness of about 25 microinches.